Mite Makes Crawford County Residents Itchy

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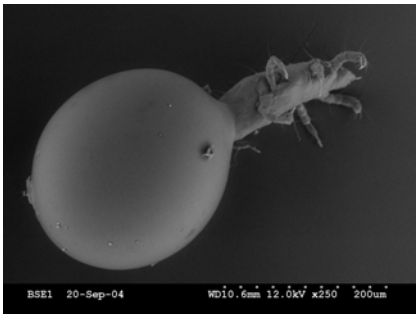
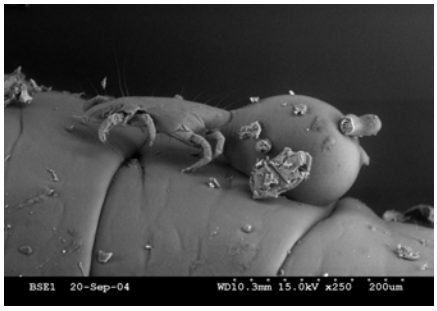
Beginning the last week of August, a large number of Crawford County residents sought medical care for an itchy rash. Initially, 300 individuals in Pittsburg (population approximately 19,000) sought treatment. By Sept. 8, three other counties in southeast Kansas (Labette, Cherokee, and Bourbon), and three counties in southwest Missouri (Jasper, Barton, and Vernon) had been affected.

Reports of a similar rash in Nebraska followed. The rash was characterized as "bug bites" and usually responded to topical treatments, though the rash spontaneously resolved after several days to a few weeks. The bites caused discomfort but they did not pose a serious health threat. There was no evidence that the bites transmitted disease or that there was person-to-person transmission of the mite. No deaths or hospitalizations due to the bites were reported. Residents were concerned about the cause or causes and asked for help from the public health community.





Far left – A close-up of the female gravid, 'straw itch', mite.

Left – A close-up of the mite on the larvae

On Sept. 13, the Centers for Disease Control and Prevention (CDC) responded to the Bureau of Epidemiology and Disease Prevention's (BEDP) request for help and sent an Epi-Aid team. The team arrived in Pittsburg to provide support for the investigation. KDHE, Kansas State University entomology and extension services, University of Nebraska, Kansas Department of Agriculture, Pittsburg State University, and Crawford County Health Department were all involved in the investigation. The multi-agency team was able to find a cause of the problem and propose solutions.

Information gathered from the investigation suggests that the bites were a result of the straw itch mite (*Pyemotes* spp.). The mites were identified in samples of oak tree leaf galls that were sent to Kansas State University. This mite is invisible to the naked eye and is a parasite that normally feeds on the insect

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larvae that produce galls. The mites are small enough to be carried on the breeze like dust. The unusual weather conditions this summer were probably a factor in the unusual proliferation of the mites.

The use of insect repellents containing DEET is recommended for preventing the bites, but it may not completely prevent them. Avoiding grassy areas or showering with soap and water after being in a grassy area is also recommended. Oral antihistamines and topical anti-itch creams have been useful in alleviating the discomfort caused by the bites.

It is not advisable to spray insecticides to kill the mites as they are encapsulated and the spray would not be effective. The mite population should decrease or completely disappear with the onset of the first frost.